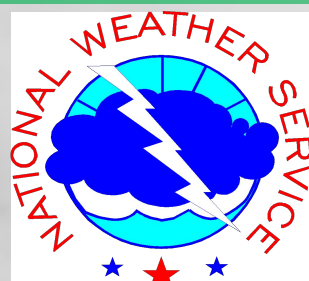


The National Hurricane Center/ Tropical Analysis and Forecast Branch's (TAFB's) 2021 Hurricane Season Summary

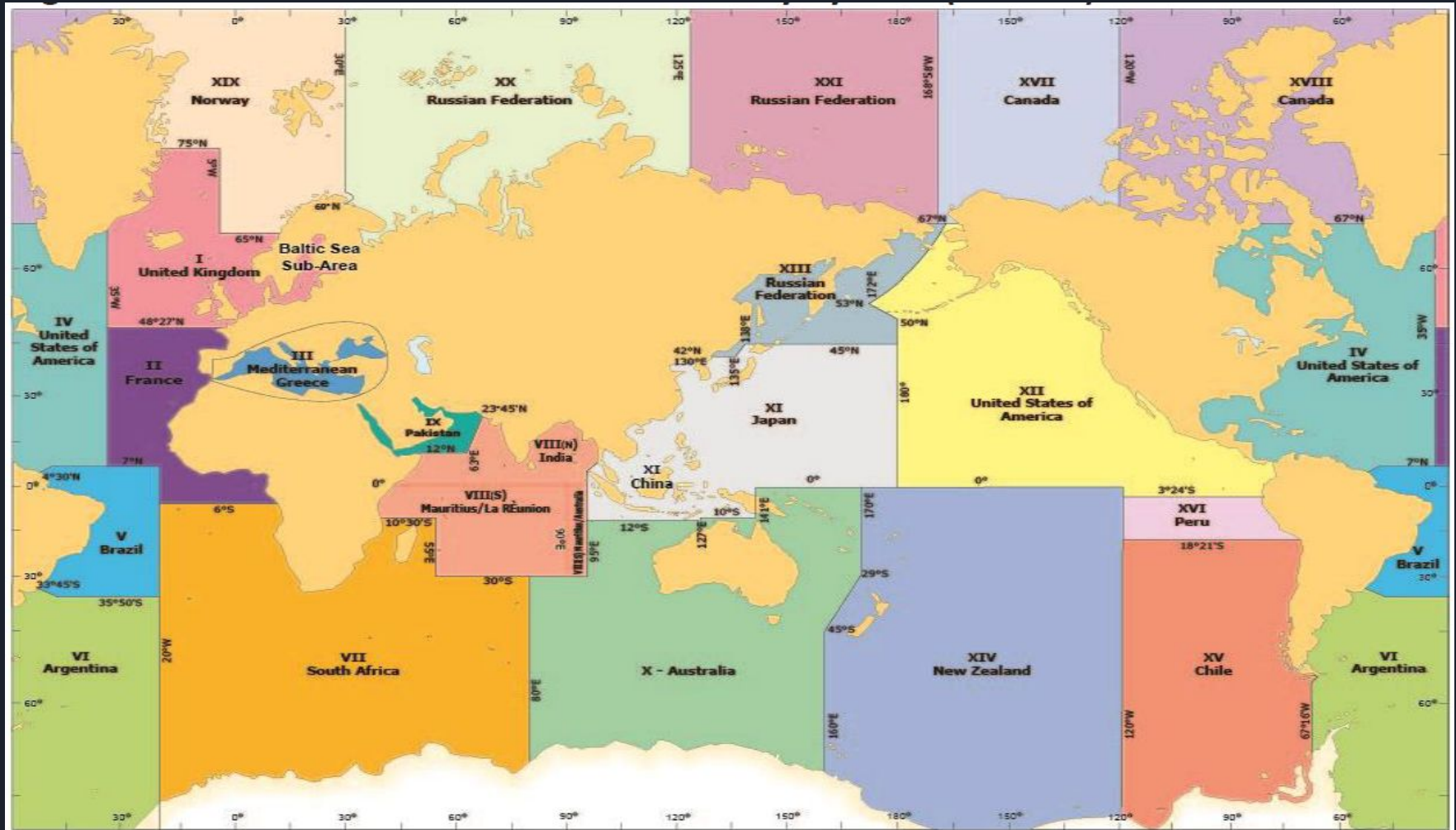
Chris Landsea
Chris.Landsea@noaa.gov
NHC/TAFB Branch Chief
9 March 2022

**To provide meteorological analysis, forecasts and
warnings over the tropical and subtropical oceans for
the protection of life and property**



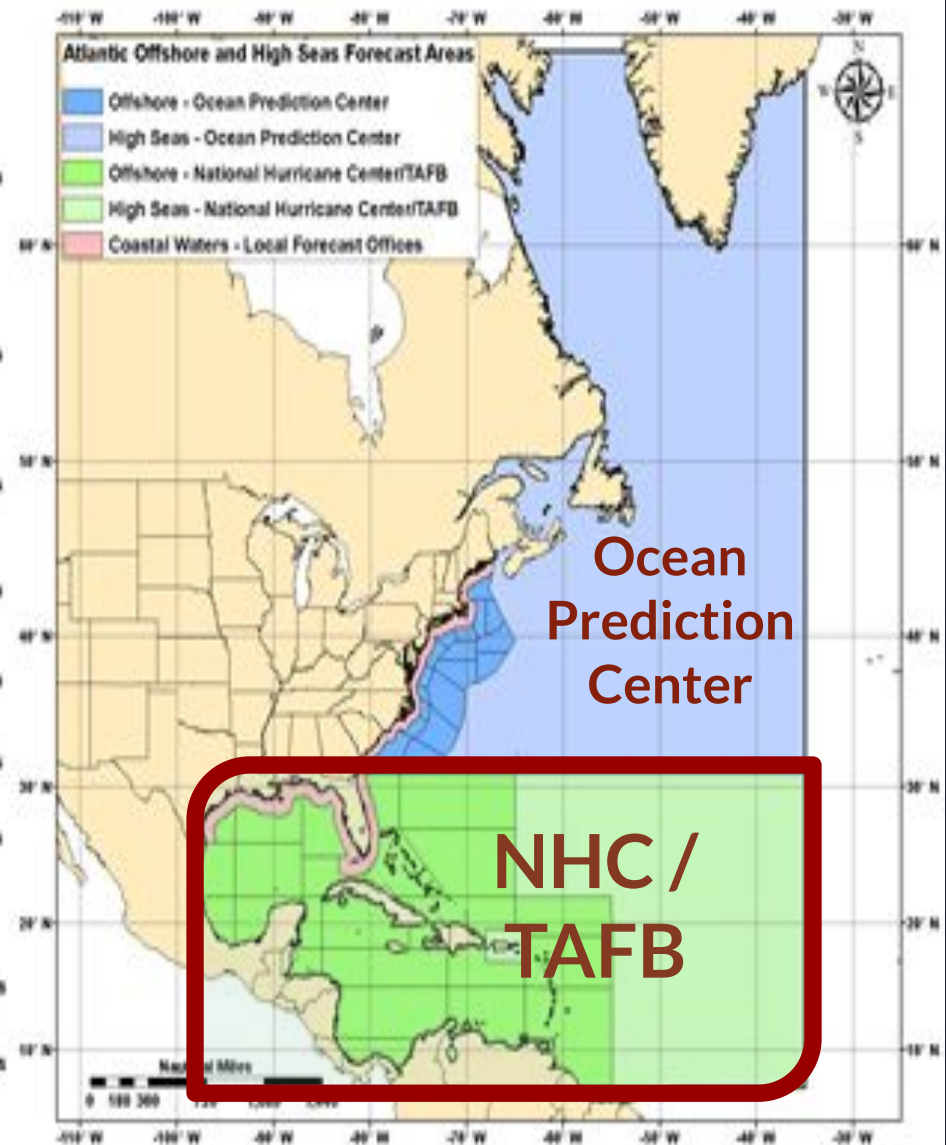
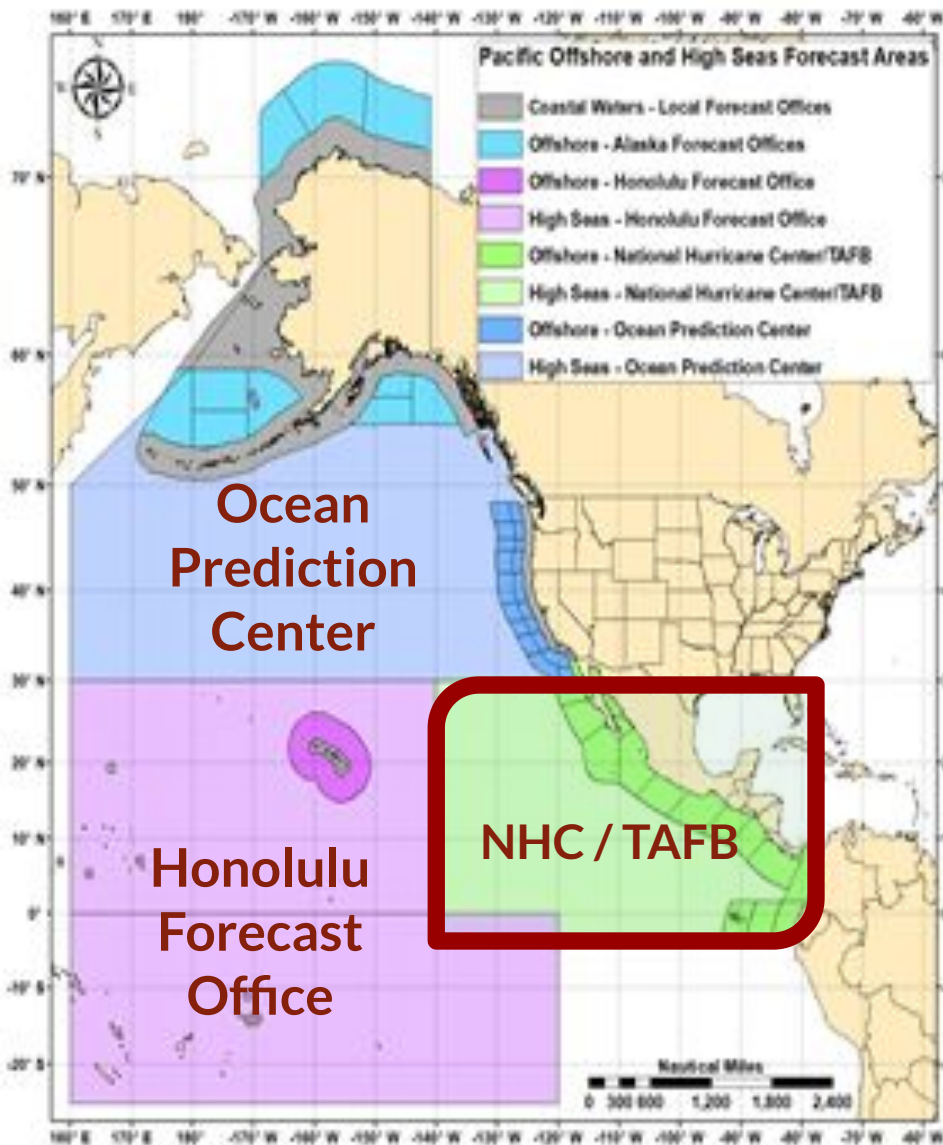
Global High Seas Forecasts

- International Maritime Organization

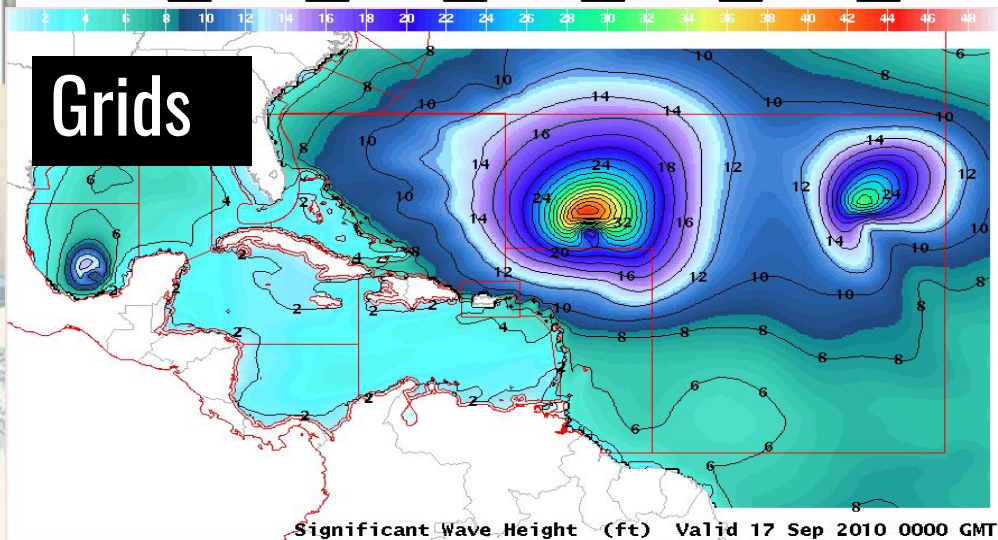
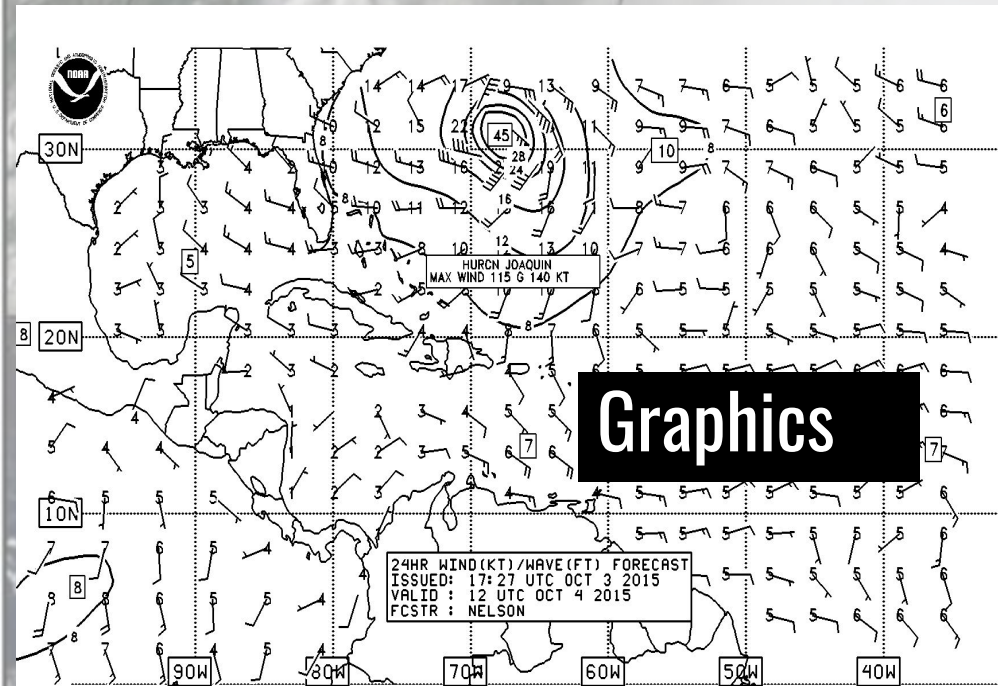




NHC/TAFB - Areas of Responsibility



NHC/TAFB Wind and Wave Forecasts



High Seas and Offshores Text Forecasts

HIGH SEAS FORECAST
NWS NATIONAL HURRICANE CENTER
1030 UTC FRI OCT 02 2015

SUPERSEDED BY NEXT ISSUANCE IN 6 HOURS

SEAS GIVEN AS SIGNIFICANT WAVE HEIGHT...WHICH IS THE AVERAGE HEIGHT OF THE HIGHEST 1/3 OF THE WAVES. INDIVIDUAL WAVES MAY BE MORE THAN TWICE THE SIGNIFICANT WAVE HEIGHT.

PAN PAN

ATLANTIC FROM 07N TO 31N W OF 35W INCLUDING CARIBBEAN SEA AND GULF OF MEXICO.

SYNOPSIS VALID 0600 UTC FRI OCT 02.

24 HOUR FORECAST VALID 0600 UTC SAT OCT 03.

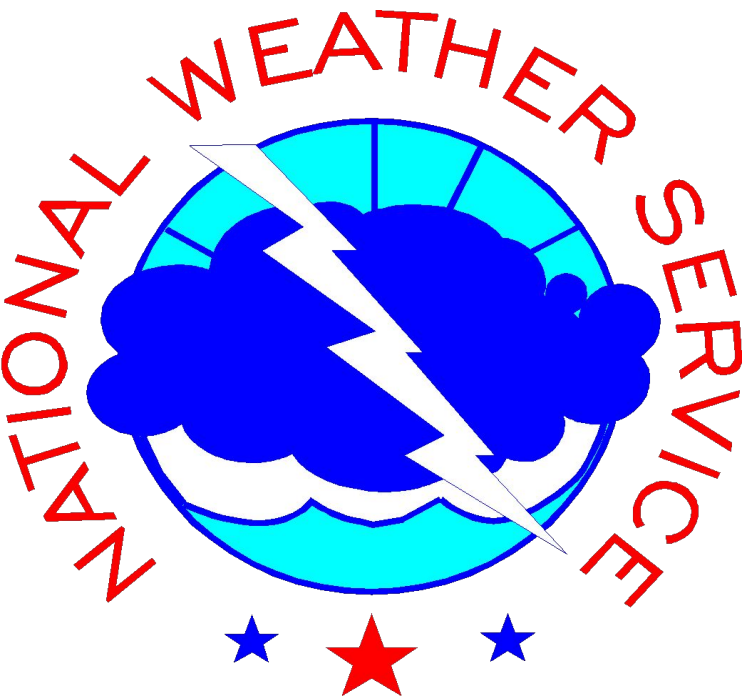
48 HOUR FORECAST VALID 0600 UTC SUN OCT 04.

.WARNINGS.

...HURRICANE WARNING...

.HURRICANE JOAQUIN NEAR 23.3N 74.7W 935 MB AT 0900 UTC OCT 02 MOVING NW OR 315 DEG AT 3 KT. MAXIMUM SUSTAINED WINDS 115 KT GUSTS 140 KT. TROPICAL STORM FORCE WINDS WITHIN 160 NM W SEMICIRCLE...140 NM NE QUADRANT AND 180 NM SE QUADRANT. SEAS 12 FT OR GREATER WITHIN 400 NM NE QUADRANT...150 NM SE QUADRANT...120 NM SW QUADRANT...AND 300 NM NW QUADRANT WITH SEAS TO 39 FT. ELSEWHERE S OF 28N BETWEEN 70W AND 78W WINDS 20 TO 33 KT. SEAS 9 TO 12 FT. N OF 28N BETWEEN 70W AND 75W E WINDS 20 TO 25 KT SEAS 8 TO 10 FT. REMAINDER OF AREA N OF 21N BETWEEN 65W AND 78W AND OUTSIDE OF THE BAHAMAS WINDS 20 KT OR LESS. SEAS 8 TO 11 FT IN MIXED SWELL.





**MEMORANDUM OF AGREEMENT
BETWEEN
THE UNITED STATES COAST GUARD
AND
THE NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
REGARDING
THE MANAGEMENT OF MARINE
WEATHER INFORMATION**

APPROVED: 03/30/2020

A handwritten signature in blue ink, reading "Louis W. Uccellini".

Louis W. Uccellini
NOAA Assistant Administrator
for Weather Services

APPROVED: 3/31/20

A handwritten signature in blue ink, reading "RV Timme".

Richard V. Timme
Rear Admiral, USCG
Assistant Commandant for
Prevention Policy



2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)



80 Spot Forecasts by NHC/TAFB for 2021 U.S. Coast Guard District Operations





2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)



USCG District 7 Hurricane Tabletop Exercise July 22-28, 2021

Planning

- Stephen Konarik led the TAFB team with Andrew Hagen and Amanda Reinhart
- Began planning with USCG District 7 in February 2021
- Three separate, simultaneous tropical storms /hurricanes impacting D7 (Charleston/ Savannah, South Florida/ Tampa Bay, and Puerto Rico)
- Philippe Papin and Brad Reinhart (Hurricane Specialists Unit) created the HSU products
- Alexandria Andonian (Storm Surge Unit) provided the Storm Surge forecasts
- Michel Davison (Weather Prediction Center International) created precipitation forecast for the storms impacting Puerto Rico

Exercise

- Organized 8 full briefings with each having 3 “mini” briefings within them (24 separate briefings altogether)
- Aside from team, Chris Landsea, Eric Christensen, Nelsie Ramos, and Maria Torres gave briefings with Alexandria giving most storm surge briefings
- On July 27, Stephen, Andrew, Amanda, Eric, and Alexandria visited D7 and gave the morning briefing in-person





2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)



Atlantic Maritime Search and Rescue Regions

UNCLASSIFIED



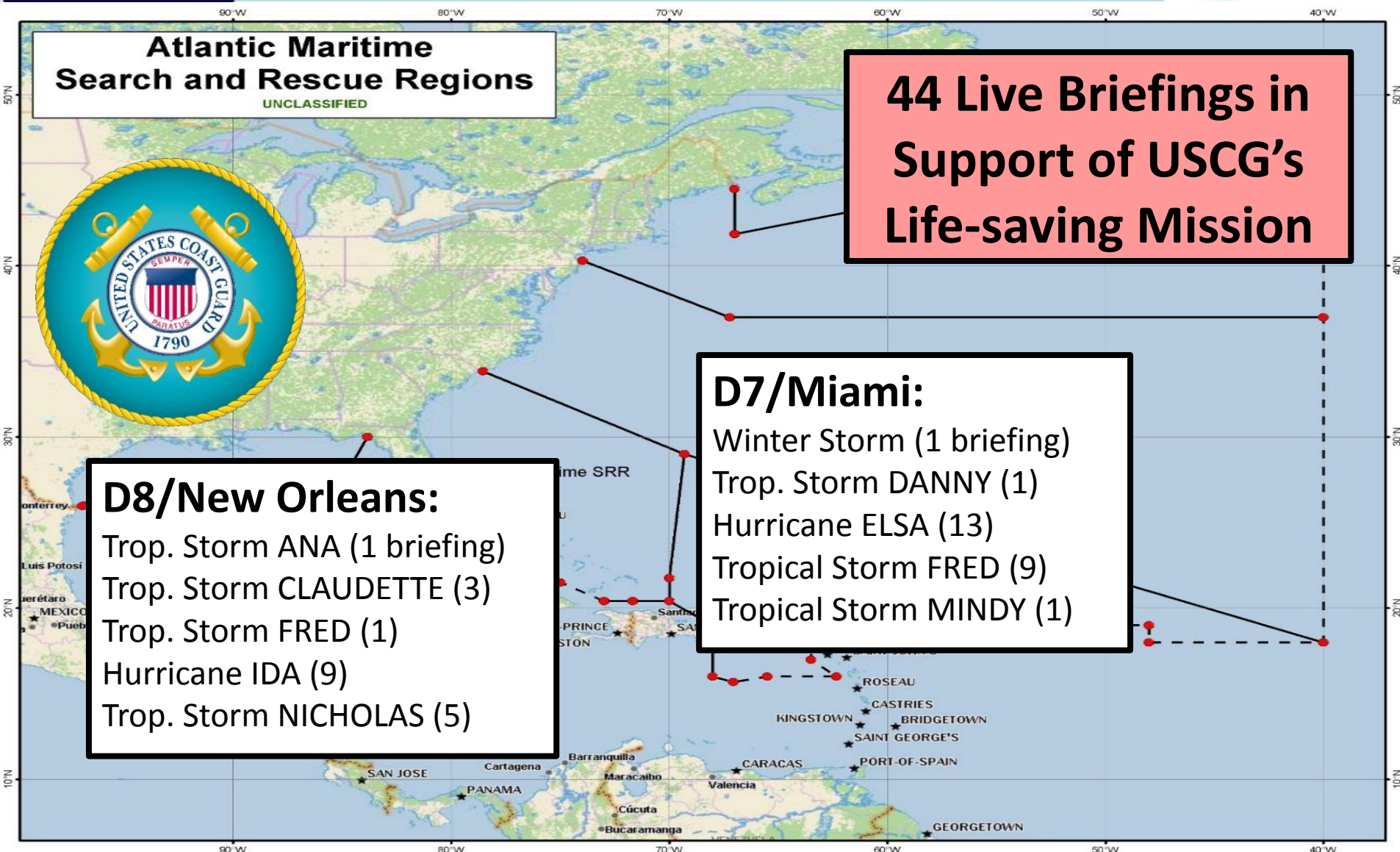
**44 Live Briefings in
Support of USCG's
Life-saving Mission**

D8/New Orleans:

Trop. Storm ANA (1 briefing)
Trop. Storm CLAUDETTE (3)
Trop. Storm FRED (1)
Hurricane IDA (9)
Trop. Storm NICHOLAS (5)

D7/Miami:

Winter Storm (1 briefing)
Trop. Storm DANNY (1)
Hurricane ELSA (13)
Tropical Storm FRED (9)
Tropical Storm MINDY (1)





USCG Heartland
@USCGHeartland

U.S. Coast Guard Air Station New Orleans is making preparations to respond to Hurricane Ida ! 🌧️

After the storm passes, Air Station New Orleans will be able to provide overflight damage assessments and will conduct search and rescue efforts as needed.

#USCGIda #Storm21



6:01 PM · Aug 28, 2021 · Twitter Web App



USCG Heartland
@USCGHeartland

The @USCG continues to conduct overflights, identify hazards, and assess areas damaged by #HurricaneIda.

Our aircrews were able to land a helicopter on the road to medevac an elderly woman with medical concerns Monday evening.

#USCGIda #Storm21



2:18 PM · Aug 31, 2021 · Twitter Web App

2021 Impact-based Decision Support Services to U.S. Coast Guard Districts by Tropical Analysis and Forecast Branch (TAFB)/ National Hurricane Center (NHC)

Hurricane Ida

- NHC/TAFB provided nine live briefings
- First provided **before** NHC had issued any advisories, but when NHC/TAFB had proactively issued a Gale Warning in advance of Tropical products

“Good Morning Chris,

Thanks for the email. We are doing pretty well and still [cooping] in St. Louis...It has been a busy couple weeks and once again, despite the significant destruction, the loss of life and search and rescue was relatively low which is a testament to all of you and your forecasting. Most people heeded your warnings and evacuated the hardest hit areas.

The briefings Maria [Torres], Amanda [Reinhart], and you provided were excellent and allowed us to evacuate many locations and best position our resources to respond after landfall.

Thanks again to your entire team!”
CAPT Harper Phillips
Chief of Incident Management
Coast Guard District Eight





**2021 Impact-based Decision Support Services
to U.S. Coast Guard Districts
by Tropical Analysis and Forecast Branch (TAFB)/
National Hurricane Center (NHC)**



NHC/TAFB's 2021 Foreign Nation IDSS

TAFB's Spanish-speaking forecasters provided critical Impact-based Decision Support Services during the 2021 Hurricane Season:

- For NHC/Hurricane Specialist Unit: Coordinating warnings with Cuba, Dominican Republic, and Mexico 30 times
- For the U.S. Air Force's Chief, Aerial Reconnaissance Coordination, All Hurricanes (CARCAH): Coordinating Hurricane Hunter overflight clearance with Mexico 6 times

National Hurricane Center/Tropical Analysis and Forecast Branch

<https://www.nhc.noaa.gov/marine/?atlc>



1-305-229-4424 -Atlantic/Gulf/Caribbean 1-305-229-4425 -Pacific On Twitter: [@NHC_TAFB](#)